Section 4.6: GREENHOUSE GAS EMISSIONS

EARVIN "MAGIC" JOHNSON RECREATION AREA MASTER PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

4.6 Greenhouse Gas Emissions/Climate Change

This section evaluates greenhouse gas (GHG) emissions associated with the proposed Project and analyzes Project compliance with applicable regulations. The Project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, are analyzed in this section. GHG technical data is included as Appendix B, *Air Quality/Greenhouse Gas Emissions Data*, of this EIR.

ENVIRONMENTAL SETTING

The Project site lies within the southern portion of the South Coast Air Basin (Basin). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin.

SCOPE OF ANALYSIS FOR CLIMATE CHANGE

The study area for climate change and the analysis of GHG emissions is broad because climate change is influenced by world-wide emissions and their global effects. However, the study area is also limited by the California Environmental Quality Act

(CEQA) Guidelines [Section 15064(d)], which directs lead agencies to consider an "indirect physical change" only if that change is a reasonably foreseeable impact which may be caused by the Project.

The baseline against which to compare potential impacts of the Project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities that have grown more than 70 percent between 1970 and 2004. The State of California is leading the nation in managing GHG emissions. Accordingly, the impact analysis for this Project relies on guidelines, analyses, policy, and plans for reducing GHG emissions established by the California Air Resources Board (CARB). This analysis also cites and relies on local air quality management district recommendations from the South Coast Air Quality Management District (SCAQMD) for CEQA assessment of GHG emissions.

GREENHOUSE GAS EMISSIONS

The natural process through which heat is retained in the troposphere is called the "greenhouse effect." The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHG in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This "trapping" of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The most abundant GHGs are water vapor and carbon dioxide. Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have

¹ The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

established a Global Warming Potential for each GHG based on its ability to absorb and re-radiate long wave radiation. GHGs normally associated with the proposed Project include the following:²

- Water Vapor (H₂O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, this is not believed to contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The Intergovernmental Panel on Climate Change (IPCC) has not determined a Global Warming Potential for water vapor.
- <u>Carbon Dioxide (CO2)</u>. Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 40 percent.³ Carbon dioxide is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
- <u>Methane (CH4)</u>. Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam

² All Global Warming Potentials are given as 100 year GWP. Unless noted otherwise, all Global Warming Potentials were obtained from the Intergovernmental Panel on Climate Change. Climate Change (Intergovernmental Panel on Climate Change, Climate Change, The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the IPCC, 1996).

³ U.S. Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks* 1990 to 2012, April 2014.

production, and power generation. The Global Warming Potential of methane is 21.

- <u>Nitrous Oxide (N2O)</u>. Nitrous oxide is produced by both natural and human related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The Global Warming Potential of nitrous oxide is 310.
- <u>Hydrofluorocarbons (HFCs)</u>. HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing, as the continued phase out of chlorofluorocarbons (CFCs) and hydro chlorofluorocarbons (HCFCs) gains momentum. The Global Warming Potential of HFCs range from 140 for HFC-152a to 11,700 for HFC-23.4
- <u>Perfluorocarbons (PFCs)</u>. Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. Perfluorocarbons are potent GHGs with a Global Warming Potential several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).⁵ The Global Warming Potential of PFCs range from 6,500 to 9,200.
- <u>Sulfur hexafluoride (SF6)</u>. Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the IPCC with a Global Warming Potential of 23,900. However, its global warming contribution is not as high as the Global Warming Potential would indicate due to its low mixing ratio

⁴ U.S. Environmental Protection Agency, *Overview of Greenhouse Gases*, April 17, 2014. http://epa.gov/climatechange/ghgemissions/gases/fgases.html, accessed April 2, 2015.

⁵ Ibid.

compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm], respectively).⁶

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone (O₃) depletors; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

- <u>Hydrochlorofluorocarbons (HCFCs)</u>. HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The Global Warming Potentials of HCFCs range from 77 for HCFC-123 to 2,310 for HCFC-142b.⁷
- <u>1,1,1 trichloroethane</u>. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The Global Warming Potential of methyl chloroform is 146 times that of carbon dioxide.⁸
- <u>Chlorofluorocarbons (CFCs)</u>. CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the U.S. Environmental Protection Agency's (EPA) Final Rule (57 FR 3374) for the phase out of O₃ depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect.

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⁶ Ibid.

⁷ U.S. Environmental Protection Agency, *Class II Ozone-depleting Substances*, dated November 7, 2014. http://www.epa.gov/ozone/science/ods/classtwo.html, accessed April 2, 2015.

⁸ Ibid.

CFCs are potent GHGs with Global Warming Potentials ranging from 4,750 for CFC 11 to 14,420 for CFC 13.9

REGULATORY FRAMEWORK

FEDERAL

The Federal government is extensively engaged in international climate change activities in areas such as science, mitigation, and environmental monitoring. The EPA actively participates in multilateral and bilateral activities by establishing partnerships and providing leadership and technical expertise. Multilaterally, the United States is a strong supporter of activities under the United Nations Framework Convention on Climate Change (UNFCCC) and the IPCC.

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus around the evidence that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

In December 2007, Congress passed the first increase in corporate average fleet fuel economy (CAFE) standards. The new CAFE standards represent an increase to 35 miles per gallon (mpg) by 2020. In March 2009, the Obama Administration announced that for the 2011 model year, the standard for cars and light trucks will be 27.3 mpg, the standard for cars will be 30.2 mpg; and standard for trucks would be 24.1 mpg.

⁹ U.S. Environmental Protection Agency, *Class I Ozone Depleting Substances*, dated June 21, 2013. http://www.epa.gov/ozone/science/ods/classone.html, accessed April 2, 2015.

Additionally, in May 2009 President Barack Obama announced plans for a national fuel-economy and GHG emissions standard that would significantly increase mileage requirements for cars and trucks by 2016. The new requirements represent an average standard of 39 mpg for cars and 30 mpg for trucks by 2016.

In May 2010, EPA and Department of Transportation's National Highway Traffic Safety Administration (NHTSA) issued a joint Final Rule to establish a National Program comprised of new standards for light-duty vehicles that will reduce GHG emissions and improve fuel economy. In October 2012, the EPA and NHTSA issued final rules to extend the National Program standards to further decrease GHG emissions and increase fuel economy for light-duty vehicles for model years 2017-2025. NHTSA is finalizing CAFE standards for model years 2017-2025 while issuing augural standards for 2022-2025 model years under the Energy and Security Act. EPA is finalizing GHG emission standards for 2017-2025 model years under the Federal Clean Air Act (FCAA) and modifying changes to the regulations applicable to model years 2012-2016 in regards to air conditions performance, nitrous oxides measurement, off-cycle technology credits, and police and emergency vehicles.

In September 2009, the EPA finalized a GHG reporting and monitoring system that began on January 1, 2010. In general, this national reporting requirement will provide the EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons (MT) or more of CO₂ per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective emissions reduction strategies. This new program covers approximately 85 percent of the nation's GHG emissions and applies to approximately 10,000 facilities. The reporting system is intended to provide a better understanding of where GHGs are coming from and will guide development of the best possible policies and programs to reduce emissions.

Currently, the EPA is moving forward with two key climate change regulatory proposals, one to establish a mandatory GHG reporting system and one to address the 2007 Supreme Court decision in Massachusetts v. EPA (Supreme Court Case 05-1120)

regarding the EPA's obligation to make an endangerment finding under Section 202(a) of the FCAA with respect to GHGs. Massachusetts v. EPA was argued before the United States Supreme Court on November 29, 2006. Under the FCAA, the EPA is now obligated to issue rules regulating global warming pollution from all major sources. In April 2009, the EPA concluded that GHGs are a danger to public health and welfare, establishing the basis for GHG regulation.

STATE

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

<u>Executive Order S-1-07</u>. Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

<u>Executive Order S-3-05</u>. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (Cal/EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of Cal/EPA created the California Climate Action Team (CAT), made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

<u>Executive Order S-13-08</u>. Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of State's first climate adaptation strategy. This will result in consistent guidance from experts on how to address climate change impacts in the State of California.

Executive Order S-14-08. Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-20-04. Executive Order S-20-04, the California Green Building Initiative, (signed into law on December 14, 2004), establishes a goal of reducing energy use in State-owned buildings by 20 percent from a 2003 baseline by 2015. It also encourages the private commercial sector to set the same goal. The initiative places the California Energy Commission (CEC) in charge of developing a building efficiency benchmarking system, commissioning and retro-commissioning (commissioning for

existing commercial buildings) guidelines, and developing and refining building energy efficiency standards under Title 24 to meet this goal.

Executive Order S-21-09. Executive Order S-21-09, 33 percent Renewable Energy for California, directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002) which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006) which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Assembly Bill 1493. AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State."

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks

within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. When fully phased in, the near-term standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards will result in a reduction of about 30 percent.

Assembly Bill 3018. AB 3018 established the Green Collar Jobs Council (GCJC) under the California Workforce Investment Board (CWIB). The GCJC will develop a comprehensive approach to address California's emerging workforce needs associated with the emerging green economy. This bill will ignite the development of job training programs in the clean and green technology sectors.

<u>Senate Bill 97</u>. SB 97, signed in August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directs the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions (or the effects of GHG emissions), as required by CEQA.

OPR published a technical advisory recommending that CEQA lead agencies make a good-faith effort to estimate the quantity of GHG emissions that would be generated by a proposed project. Specifically, based on available information, CEQA lead agencies should estimate the emissions associated with project-related vehicular traffic, energy consumption, water usage, and construction activities to determine whether project-level or cumulative impacts could occur, and should mitigate the impacts where feasible. OPR requested CARB technical staff to recommend a method for setting CEQA thresholds of significance as described in CEQA Guidelines Section 15064.7 that will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

The Natural Resources Agency adopted the CEQA Guidelines Amendments prepared by OPR, as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The CEQA Guidelines Amendments became effective on March 18, 2010.

Senate Bill 375. SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding programmed after January 1, 2012.

<u>Senate Bills 1078 and 107</u>. SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

Senate Bill 1368. SB 1368 (Chapter 598, Statutes of 2006) is the companion bill of AB 32 and was signed into law in September 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007. SB 1368 also required the CEC to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas fired plant. Furthermore, the legislation states that

all electricity provided to California, including imported electricity, must be generated by plants that meet the standards set by CPUC and CEC.

CARB Scoping Plan. On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California will implement to reduce CO₂eq¹⁰ emissions by 174 million MT, or approximately 30 percent, from the State's projected 2020 emissions level of 596 million MT CO₂eq under a business as usual (BAU)¹¹ scenario. This is a reduction of 42 million MT CO₂eq, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. At the time CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32. On February 10, 2014, CARB released the draft proposed first update. The appendices to the report, including the environmental analysis will be released at a later date. On May 22, 2014, CARB approved the First Update to the AB 32 Scoping Plan. The update identifies opportunities to leverage existing and new funds to further drive GHG emissions

¹⁰ Carbon Dioxide Equivalent (CO₂eq) - A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

¹¹ "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions. See http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

reductions through strategic planning and targeted low carbon investments. The update also defined CARB's climate change priorities for the next five years, and sets the groundwork to each long-term goals set forth in Executive Orders S-3-05 and B-15-2012. Lastly, the update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan, and evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities in water, waste, natural resources, clean energy, transportation, and land use.

LOCAL

Los Angeles County

LOS ANGELES COUNTY GENERAL PLAN

The County of Los Angeles General Plan (1980) Conservation and Open Space Element includes the following objectives and policies related to reducing GHGs.

Conservation and Open Space Element

Objective: Support local efforts to improve air quality.

Improve air quality

Air quality in Los Angeles County is severe enough to threaten health. Unfocused development and the dependence of the population on the automobile contribute

to the problem.

Policy 1: Actively support strict air quality regulations for mobile and

stationary sources, and continued research to improve air quality. Promote vanpooling, carpooling, and improved

public transportation.

LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

In July 2014, the County of Los Angeles (County) adopted the Community Climate Action Plan (CCAP) to reduce and avoid GHG emissions associated with community activities in the unincorporated areas of the County. The CCAP addresses emissions

from community activities in the following sectors: building energy, transportation, water conveyance and wastewater processing, and waste generation. The CCAP establishes a GHG reduction target from community activities in the unincorporated areas of the County by at least 11 percent below 2010 levels by 2020. The County has set a target consistent with the State's efforts to reduce GHG emissions, and provides a roadmap for successfully implementing GHG reduction measures selected by the County. This CCAP describes the County's plan for achieving this goal, including specific strategy areas for each of the major emissions sectors, and provides details on the 2010 and projected 2020 emissions in the unincorporated areas. The actions outlined in the CCAP tie the County's existing climate change initiatives together, and provide a blueprint for a more sustainable future. As a component of the General Plan Air Quality Element, the CCAP actions are closely tied to many of the goals, policies, and programs of the General Plan, as well as to several other existing programs in the County. Furthermore, the CCAP satisfies the County's goals of meeting the recommendations for local governments in the Scoping Plan of AB 32, California's Global Warming Solutions Act.

Los Angeles County Green Building Program

In 2008, the County adopted the *Green Building Program*, which included the Drought-Tolerant Landscaping, Green Building, and Low Impact Development Ordinances, and created an Implementation Task Force and Technical Manual. In November 2013, in response to the mandates set forth in CALGreen (2010 California Green Building Standards Code), the Board of Supervisors adopted the County Municipal Code Title 31, Green Building Standards Code. The County is currently working on an ordinance to repeal Green Building and Drought Tolerant Landscaping requirements from Title 22, Planning and Zoning Code. Additionally, the ordinance will update the *Green Building Program's* tree requirements in order to increase shade to sidewalks and parking lots for human comfort, and to shade buildings to conserve energy used for air conditioning.

LOS ANGELES COUNTY MUNICIPAL CODE

Part 4, Water Conservation Requirements for the County contains the County's water conservation regulations related to watering, landscaping standards, and indoor plumbing and fixtures. The requirements establish standards and procedures for restrictions to excessive watering.

Chapter 20.87, Construction and Demolition Debris Recycling and Reuse establishes the recycling and reuse requirements of at least 50 percent determined by weight and by material to be removed, recycled or reused from a project site. The purpose is to increase the recycling and reuse of construction and demolition debris, consistent with the goals of the California Integrated Waste Management Act of 1989.

CITY OF LOS ANGELES GENERAL PLAN

The *City of Los Angeles General Plan* Air Quality Element and Housing Element includes the following goals, objectives and policies related to reducing GHGs.

Air Quality Element

Goal 5:	Energy efficiency through land use and transportation		
	planning, the use of renewable resources and less polluting		
	fuels, and the implementation of conservation measures		
	including passive methods such as site orientation and tree		
	planting.		
Objective 5.1	It is the objective of the City of Los Angeles to increase		
	energy efficiency of City facilities and private developments.		
Policy 5.1.2	Effect a reduction in energy consumption and shift to non-		
	polluting sources of energy in its buildings and operations.		
Policy 5.1.4	Reduce energy consumption and associated air emissions by		
	encouraging waste reduction and recycling.		

Housing Element

Goal 2: Safe, Livable, and Sustainable Neighborhoods

Objective 2.3 Promote sustainable buildings, which minimize adverse

effects on the environment and minimize the use of non-

renewable resources.

Policy 2.3.4 Promote and facilitate reduction of waste in construction

and building operations.

CITY OF LOS ANGELES CLIMATE ACTION PLAN

On May 2007, the City released its climate action plan, *Green LA: An Action Plan to Lead the Nation in Fighting Global Warming.* The Plan sets forth a goal of reducing the City's GHG emissions to 35 percent below 1990 levels by the year 2030. This voluntary plan identifies over 50 action items, grouped into focus areas, to reduce emissions. As the plan covers emissions from public and private activities, it addresses emissions from major sources of CO2, including the production and consumption of electricity, and transportation fuel and natural gas consumption. The scope of these actions range from those impacting only municipal facilities, such as retrofitting City Hall with high efficiency lighting systems, to those facilitating changes in the private sector, such as rebates for the purchase of energy-efficient appliances.

CITY OF LOS ANGELES MUNICIPAL CODE

Chapter XII, Article I provides a mandatory water conservation plan to minimize the effect of a shortage of water to the Customers of the City and adopt provisions that will significantly reduce the consumption of water over an extended period of time, thereby extending the available water required for the Customers of the City while reducing the hardship of the City and the general public to the greatest extent possible. As voluntary conservation measures have proven insufficient, the plan provides water conservation phases and schedules for permissible outdoor watering with sprinklers. The phases correspond with the severity of water storage, with each increase in phase containing stricter conservation measures. Prohibited uses of water would be applicable to all customers.

IMPACT THRESHOLDS AND SIGNIFICANCE CRITERIA

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance.

Lead agencies may elect to rely on thresholds of significance recommended or adopted by State or regional agencies with expertise in the field of global climate change (CEQA Guidelines Section 15064.7(c).) CEQA leaves the determination of significance to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects. However, the County and the City have not yet established specific quantitative significance thresholds for GHG emissions for development projects.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.¹²

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a

 $^{^{\}rm 12}$ The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.

significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 MTCO₂eq per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, the Project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. Under the Tier 4 second option, the Project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the Tier 4 third option, Project would be excluded if was below an efficiency-based threshold of 4.8 MTCO₂eq per service population (SP) per year. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

Based on the size of the Project and the tiered approach above, the 4.8 MTCO₂eq per SP per year efficiency-based threshold has been selected as the significance threshold, as it is most applicable to the proposed Project. The 4.8 MTCO₂eq per SP per year threshold is used in addition to the qualitative thresholds of significance set forth below from section VII of Appendix G to the CEQA Guidelines.

¹³ The project-level efficiency-based threshold of 4.8 MTCO₂eq per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 MTCO₂eq per SP per year and an efficiency threshold at the project level of 3.0 MTCO₂eq/year.

CEQA SIGNIFICANCE CRITERIA

The issues presented in the Initial Study Environmental Checklist (CEQA Guidelines Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement 4.6-1);
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement 4.6-2).

Based on these significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

PROJECT IMPACTS AND MITIGATION

Threshold:	Would the Project generate greenhouse gas emissions, either directly or
	indirectly, that may have a significant impact on the environment?

Impact 4.6-1 Implementation of the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be less than significant.

Project-related GHG emissions for "business as usual" conditions include emissions from construction activities, area sources, and mobile sources. As previously stated, "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reduction measures. Table 4.6-1 presents the estimated CO₂, N₂O, and CH₄ emissions.

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The CalEEMod computer model outputs are contained within the Appendix B, Air Quality/Greenhouse Gas Emissions Data, of this EIR. CalEEMod was used to calculate mobile source, area source, and construction GHG emissions. Operational GHG estimations are based on energy emissions from natural gas usage, electricity consumption, water demand, wastewater generation, solid waste generation, and automobile emissions. CalEEMod relies upon construction phasing and project-specific land use data to calculate emissions; refer to Appendix B of this EIR.

Table 4.6-1 Business As Usual Greenhouse Gas Emissions

	CO ₂	CI	H ₄	N:	2O	Total
Source	Metric Tons/yr¹	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons of CO ₂ eq
Existing Direct Emissions						
Area Source	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Source	2,754.96	0.12	3.00	0.00	0.00	2,757.96
Total Existing Direct Emissions ³	2,754.96	0.12	3.00	0.00	0.00	2,757.96
Existing Indirect Emissions						
• Energy	0.00	0.00	0.00	0.00	0.00	0.00
Water Demand	766.76	0.02	0.45	0.00	1.10	768.31
Solid Waste	1.81	0.11	2.70	0.00	0.00	4.51
Total Existing Indirect Emissions ³	768.57	0.13	3.15	0.00	1.10	772.82
Total Existing Emissions ³			3,530.78 M	TCO2eq/yr		
Proposed Direct Emissions						
Construction (amortized over 30 years)	1,253.49	0.11	2.67	0.00	0.00	1,255.73
Area Source	0.01	0.00	0.00	0.00	0.00	0.01
Mobile Source	5,227.12	0.15	3.70	0.00	0.00	5,230.82
Total Proposed Direct Emissions ³	6,530.62	0.26	6.37	0.00	0.00	6,486.56
Proposed Indirect Emissions						
• Energy	5,317.46	0.12	3.10	0.04	10.40	5,330.96
Water Demand	1,024.98	1.02	25.50	0.03	8.50	1,058.98
Solid Waste	125.47	7.42	185.00	0.00	0.00	310.47

	CO ₂	CH ₄		N ₂ O		Total
Source	Metric Tons/yr¹	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons/yr ¹	Metric Tons of CO ₂ eq ²	Metric Tons of CO ₂ eq
Total Proposed Indirect Emissions ³	6,467.91	8.56	213.60	0.07	18.90	6,700.41
Total Project-Related Emissions ³		1	13,186.97 M	ITCO2eq/yr		
Total Project-Related Emissions Net Increase Over Existing Emissions ³						

Notes:

- 1. Emissions calculated using CalEEMod computer model.
- 2. CO₂ Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed April and July 2015.
- 3. Totals may be slightly off due to rounding.

Refer to Appendix B, Air Quality/Greenhouse Gas Emissions Data, for detailed model input/output data.

Direct Project Related Sources of GHGs

- <u>Construction Emissions</u>. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions. ¹⁴ As depicted in Table 4.6-1, the proposed Project would result in 1,255.73 MTCO₂eq/yr (amortized over 30 years), which represents a total of 37,671.89 MTCO₂eq from construction activities.
- <u>Area Source</u>. Area source emissions were calculated using CalEEMod and project-specific land use data. As noted in Table 4.6-1, the proposed Project would result in 0.01 MTCO₂eq/yr of area source GHG emissions.
- Mobile Source. The CalEEMod model relies upon trip data within the Traffic Impact Study and project-specific land use data to calculate mobile source

¹⁴ The project lifetime is based on the standard 30 year assumption of the South Coast Air Quality Management District (http://www.aqmd.gov/hb/2008/December/081231a.htm).

emissions. The Project would directly result in 5,230.82 MTCO₂eq/yr of mobile source-generated GHG emissions¹⁵.

<u>Indirect Project Related Sources of GHGs</u>

- Energy Consumption. Energy Consumption emissions were calculated using CalEEMod and project-specific land use data. Electricity would be provided to the Project site via the County Department of Water and Power (LACDWP). The Project would indirectly result in a net increase of 5,330.96 MTCO₂eq/year due to energy consumption.
- <u>Solid Waste</u>. Solid waste associated with operations of the proposed Project would result in a net increase of 305.96 MTCO₂eq/year.
- Water Demand. The LACDWP would be the main water supply provider to the proposed Project. The Project's water supply would be provided by Los Angeles Aqueducts, local groundwater, imported sources and recycled water. Emissions from indirect energy impacts due to water supply would result in a net increase of 290.67 MTCO₂eq/year.

Total Project-Related Sources of GHGs

As shown in Table 4.6-1, the total amount of project-related "business as usual" GHG emissions from direct and indirect sources combined would total 13,186.97 MTCO₂eq/yr, resulting in a net increase of 9,656.19 MTCO₂eq/yr.

¹⁵ Revised Traffic Impact Analysis dated August 12, 2015 identifies a net increase in daily trips of 3,489 from the Project at buildout. The mobile source emission calculations are based on a net increase in daily trips of 4,197 identified in the initial Traffic Impact Analysis. If the emissions were re-calculated with the reduced daily trip number they are anticipated to be slightly less than the quantities identified in Table 4.6-1. Therefore, quantities identified in Table 4.6-1are conservative estimates.

Project Design Features

The Project includes Project design features that would further reduce Project-related GHG emissions. As the Project proposes recreation, open space and office uses, the Project increases the diversity of uses within the Project vicinity as the site is surrounded by residential, institutional, and commercial uses. The Project consists of an infill development that would place recreation and office uses less than 0.01-mile from Metro bus lines. The Project includes walking trails throughout EMJ Park, providing a pedestrian network within the Project site and connecting offsite. The Project design features would further reduce operational GHG emissions at the Project site. The Project would be subject to compliance with water efficiency and conservation measures within the County Municipal Code and the City Municipal Code. These measures are intended to provide guidelines and standards for the reduction of water consumption through conservation efforts, restrictions on water use and outdoor watering, and managing efficient irrigation systems.

REDUCED GREENHOUSE GAS EMISSIONS

Project design features would reduce Project-related GHG emissions and were applied in CalEEMod. Table 4.6-2 depicts the reduced GHG emissions resulting from design features associated with water, solid waste, and land use efficiency measures.

Table 4.6-2 Mitigated Greenhouse Gas Emissions

	CO ₂	CH ₄		N ₂ O		Total
Source	Metric Tons/yr ¹	Metric Tons/yr ¹	Metric Tons of CO ₂ eq ²	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons of CO ₂ eq
Existing Direct Emissions						
Construction (amortized over 30 years)	0.00	0.00	0.00	0.00	0.00	0.00
Area Source	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Source	2,754.96	0.12	3.00	0.00	0.00	2,757.96
Total Existing Direct Emissions ³	2,754.96	0.12	3.00	0.00	0.00	2,757.96

	CO ₂	C	H ₄	N ₂	O	Total
Source	Metric Tons/yr¹	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons/yr¹	Metric Tons of CO ₂ eq ²	Metric Tons of CO ₂ eq
Existing Indirect Emissions						
• Energy	0.00	0.00	0.00	0.00	0.00	0.00
Water Demand	766.76	0.02	0.45	0.00	1.10	768.31
Solid Waste	1.81	0.11	2.70	0.00	0.00	4.51
Total Existing Indirect Emissions ³	768.57	0.13	3.15	0.00	1.10	772.82
Total Existing Emissions ³			3,530.78 M	TCO2eq/yr		
Proposed Direct Emissions						
Construction (amortized over 30 years)	1,253.49	0.11	2.67	0.00	0.00	1,255.73
Area Source	0.01	0.00	0.00	0.00	0.00	0.01
Mobile Source	4,631.57	0.13	3.30	0.00	0.00	4637.87
Total Proposed Direct Emissions ³	5,885.07	0.20	5.10	0.00	0.00	5,893.61
Proposed Indirect Emissions						
• Energy	5,317.46	0.12	3.10	0.04	10.40	5,330.96
Water Demand	976.58	1.02	25.50	0.03	8.40	1,010.48
Solid Waste	62.74	3.71	92.70	0.00	0.00	155.44
Total Proposed Indirect Emissions ³	6,356.78	4.85	121.30	0.07	18.80	6,496.88
Total Project-Related Emissions ³		12,390.49 MTCO2eq/yr				
Total Project-Related Emissions Net Increase Over Existing Emissions ³	et 8,859.71 MTCO2eq/yr					
Mitigated Per Capita Emissions ⁴	2.54 MTCO2eq/year					
Per Capita Threshold	ld 4.8 MTCO2eq/year					
Mitigated GHG Emissions Exceed Per Capita Threshold?			N	0		

Notes:

- 1. Emissions calculated using CalEEMod computer model.
- 2. CO₂ Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed April 2015.
- 3. Totals may be slightly off due to rounding.
- 4. Per capita emissions are based on a service population of 3,489 persons. The service population was determined based on vehicle occupancy for each trip generated by the Project. As the Institute of Transportation Engineers (ITE) does not have vehicle occupancy data for park and recreation uses, the service population conservatively uses each trip generated to represent one person per vehicle.

Refer to Appendix B, Air Quality/Greenhouse Gas Emissions Data, for detailed model input/output data.

Reductions from Project Design Features accounted for in Table 4.6-2 include the following:

Project Design Features

- Increased diversity of land uses;
- Transit accessibility, as the Project site is located within 0.01 miles of Metro bus transit stops;
- Pedestrian connections to the offsite circulation network;
- Water conservation programs in compliance with City Emergency Water Conservation Plan;
- Water-efficient irrigation systems in compliance with County Municipal Code Part 4 and the City Emergency Water Conservation Plan; and
- Institute recycling and composting services to reduce solid waste by at least 50 percent.

As depicted in Table 4.6-1, the Project's "business as usual" GHG emissions would be 13,186.97 MTCO₂eq/yr. Implementation of Project design features, compliance with County and City required water conservation measures (County Part 4 and City Emergency Water Conservation Plan), the Project would result in GHG emissions of 2.54 MTCO₂eq per SP per year, which would not exceed the 4.8 MTCO₂eq/yr per SP per year GHG threshold. Impacts would be less than significant.

Threshold:	Would the Project conflict with any applicable plan, policy, or regulation
	adopted for the purpose of reducing the emissions of greenhouse gases?

Impact 4.6-2 Implementation of the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact would be less than significant.

The County adopted its CCAP in July 2014 that serves to reduce and avoid GHG emissions associated with community activities in the County. The CCAP establishes a

GHG reduction target that is consistent with AB 32. As part of the CCAP, 26 local actions have been identified to reduce GHG emissions in the unincorporated areas of the County. The Project proposes to incorporate several water, solid waste, and land use efficiency design features that are consistent with the CCAP efficiency measures. Table 4.6-3 discusses the Project's consistency with the applicable CCAP policies.

Table 4.6-3
Community Climate Action Plan Consistency

Community Crimate Action 1 fair Consistency				
CCAP Measure	Project Consistency			
LUT-2. Pedestrian Network: Construct and	Consistent. The proposed Project provides			
improve pedestrian infrastructure to increase	walking trails to increase connections to the			
walking and pedestrian access to transit and transit	pedestrian network within the Project site and			
stations/hubs. Program the construction of	offsite.			
pedestrian projects toward the goal of completing				
15,000 linear feet of new pedestrian				
improvements/amenities per year.				
LUT-6. Land Use Design and Density: Promote	Consistent. The Project would consist of			
sustainability in land use design, including	recreation, open space, and office uses, adding			
diversity of urban and suburban developments.	diversity to existing residential, institutional, and			
	commercial developments in the Project area.			
WAW-1. Per Capita Water Use Reduction Goal:	Consistent. The Project would comply with			
Meet the State established per capita water use	water conservation measures required by County			
reduction goal11 as identified by Senate Bill (SB)	and City rules and regulations for the reduction of			
X7-7 for 2020.	water consumption through conservation efforts,			
	restrictions on water use and outdoor watering,			
	and managing efficient irrigation systems.			
	(County Part 4 and City Emergency Water			
	Conservation Plan).			
SW-1. Waste Diversion Goal: For the County's	Consistent. The Project would comply with			
unincorporated areas, adopt a waste diversion goal	County Municipal Code Chapter 20.87,			
to comply with all State mandates to divert at least	Construction and Demolition Debris Recycling			
75 percent of waste from landfill disposal by 2020.	and Reuse, which requires diversion of 50 percent			
	of solid waste from disposal through measures			
	including recycling and reuse. In addition, the			
	Project would be required to reduce solid waste			
	sent to landfills by 75 percent pursuant to AB 341.			
Source: County of Los Angeles, Final Unincorporated Los Angeles County Community Climate Action Plan 2020, July				

2014.

In addition, the City released its climate action plan, *Green LA: An Action Plan to Lead the Nation in Fighting Global Warming* (Green LA) in May 2007. Green LA's goal is to reduce the City's GHG emissions to 35 percent below 1990 levels by the year 2030. This voluntary plan identifies over 50 action items, grouped into focus areas, to reduce emissions by increasing the generation of renewable energy, improving energy conservation and efficiency, and changing transportation and land use patterns to reduce dependence on automobiles. The proposed Project incorporates several water, solid waste, and land use efficiency design features that are consistent with the Green LA's environmental goals and actions. Table 4.6-4 discusses the Project's consistency with the applicable Green LA goals and actions.

Table 4.6-4 Green LA Consistency

Green LA Consistency	Project Consistency
Water Goal: Decrease Per Capita Water Use	
Action: Meet all additional demand for	Consistent. The Project would comply with water
water resulting from growth through water	conservation measures required by the City Emergency
conservation and recycling.	Water Conservation Plan for the reduction of water
	consumption through conservation efforts, restrictions on
	water use and outdoor watering, and managing efficient
	irrigation systems.
Transportation Goal: Focus on Mobility for	People, Not Cars
Action: Promote walking and biking to	Consistent. The proposed Project provides walking trails
work, within neighborhoods, and to large	to increase connections to the pedestrian network within
events and venues.	the Project site and offsite. In addition, the Project
	proposes several large venues within close proximity to
	each other including the equestrian facilities center,
	aquatic center, multi-purpose stadium, outdoor athletic
	fields, group picnic areas, amphitheater, skate park,
	outdoor basketball areas, children's play area, lake,
	wedding pavilion, dog park, sculpture garden, and civic
	plaza. The proposed uses within the Master Plan would
	utilize the entire park site to encourage walking and
	biking to and from venues.

Green LA Consistency	Project Consistency			
Waste Goal: Shift from Waste Disposal to Resource Recovery				
Action: Recycle 70 percent of trash by 2015.	Consistent. The Project would be required to reduce			
solid waste sent to landfills by 75 percent pursuant to				
341.				
Source: City of Los Angeles, Green LA, An Action Plan to Lead the Nation in Fighting Global Warming, May 2007.				

As noted above, the proposed Project would implement various Project design features consistent with the CCAP measures and Green LA goals and actions. Therefore, the proposed Project would help implement the CCAP and Green LA, and would not conflict with an adopted plan, policy, or regulation pertaining to GHGs. The Project design features are also consistent with the CCAP measures and Green LA goals and actions, and would reduce operational related GHG emissions. In addition, the Project would be subject to applicable Federal, State, and local regulatory requirements, further reducing Project-related GHG emissions. The proposed Project would not hinder the State's GHG reduction goals established by AB 32 and other strategies to help reduce GHG emissions. Therefore, a less than significant impact would occur.

CUMULATIVE IMPACTS

Impact 4.6-3 Greenhouse gas emissions generated by the proposed Project, combined with other related cumulative projects, would not have a significant impact on global climate change. This impact would be less than significant.

As stated above, the proposed Project's "business as usual" emissions would total 13,186.97 MTCO₂eq/yr, resulting in a net increase of 9,656.19 MTCO₂eq/yr. Project Design Features would reduce the Project's GHG emissions to a net increase of 8,859.71 MTCO₂eq/yr (2.54 MTCO₂eq/yr per SP per year). Therefore, Project-related GHG emissions would be below the 4.8 MTCO₂eq/yr per SP per year GHG threshold and would be less than significant.

On December 30, 2009, the Natural Resources Agency adopted the CEQA Guideline Amendments prepared by Office of Planning and Research (OPR), as directed by SB 97.

On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The CEQA Guidelines Amendments became effective on March 18, 2010. The Natural Resources Agency originally proposed to add subdivision (f) to Section 15130 to clarify that Sections 21083 and 21083.05 of the Public Resources Code do not require a detailed analysis of GHG emissions solely due to the emissions of other projects (i.e., CEQA Guidelines Section 15130(a)(1); Santa Monica Chamber of Commerce v. City of Santa Monica (2002) 101 Cal.App.4th 786, 799). Rather, the proposed subdivision (f) would have provided that a detailed analysis is required when evidence shows that the incremental contribution of the Project's GHG emissions is cumulatively considerable when added to other cumulative projects (i.e., Communities for a Better Environment v. California Resources Agency (2002), supra, 103 Cal.App.4th at 119-120). In essence, the proposed addition would be a restatement of law as applied to GHG emissions. Analysis of GHG emissions as a cumulative impact is consistent with case law arising under the National Environmental Policy Act (e.g., Center for Biological Diversity v. National Highway Traffic Safety Administration, 538 F.3d 1172, 1215-1217 [9th Cir. 2008]). Other portions of the CEQA Guideline Amendments address how lead agencies may determine whether a project's emissions are cumulatively considerable (e.g., Proposed Sections 15064(h)(3) and 15064.4). However, public comments noted that the new subdivision merely restated the law, and was capable of misinterpretation. The Natural Resources Agency, therefore, determined that because other provisions of the CEQA Guideline Amendments address the analysis of GHG emissions as a cumulative impact, and because the reasoning of those is fully explained in the Initial Statement of Reasons, subdivision (f) should not be added to the CEQA Guidelines. The deletion was reflected in the revisions that were made available for further public review and comment on October 23, 2009, and was not adopted as part of the CEQA Guidelines Amendments that became effective on March 18, 2010.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. ¹⁶ GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. ¹⁷ The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the proposed Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. This includes adherence to all Federal, State, and local policies adopted for the purpose of reducing GHG emissions. The proposed Project would result in a less than significant impact regarding GHG emissions. Therefore, the proposed Project's cumulative GHG emissions contribution would be considered less than significant.

Impact 4.6-4 The proposed Project, combined with other related cumulative projects, would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact would be *less than significant*.

The CCAP is the County's plan to mitigate and avoid GHG emissions associated with community activities in the unincorporated areas of the County and Green LA is the City's plan to confront global climate change and create a cleaner, greener, sustainable Los Angeles. Cumulative projects would be required to be consistent, as applicable with these plans to avoid cumulatively considerable impacts. The proposed Project would not generate a significant amount of GHGs. Therefore, the proposed Project would not result in a cumulatively considerable impact with regard to a conflict with the County's CCAP, the City's Green LA, and the State's GHG reduction goals established by AB 32. There are no other applicable plans, policies, or regulations that have been adopted by the County, City or other regulating agency for the purpose of reducing the emissions of GHG.

 ¹⁶ California Air Pollution Control Officers Association, CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, 2008.
 ¹⁷ Ibid.

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